AD-A022 547

SPECIA! DATA COLLECTION SYSTEM (SDCS) EVENT REPORT, NTS EVENT 'HUSKY PUP', 24 OCTOBER 1975

K. J. Hill, et al

Teledyne Geotech

Prepared for:

Air Force Technical Applications Center

28 January 1976

**DISTRIBUTED BY:** 



SDCS-ER-75-67



## SPECIAL DATA COLLECTION SYSTEM EVENT REPORT NTS Event "HUSKY PUP", 24 October 1975

K.J. Hill, M.S. Dawkins, R.R. Baumstark, and M.D. Gillespie Alexandria Laboratories Taledyne Geotech, 314 Montgomery Straet, Alexandria, Virginia 22314

January 1976

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.

Sponsored By
The Defense Advanced Research Projects Agancy
Nuclear Monitoring Research Office

1400 Wilson Boulevard, Arlington, Virginia 22209

ARPA Ordar No. 2897

Monitored By

VELA Seismological Center

312 Montgomary Street, Alexandria, Virginia 22314

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U. S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161





Disclaimer: Neither the Defense Advanced Research Projects Agency nor the Air Force Technical Applications Center will be responsible for information contained herein which has been supplied by other organizations or contractors, and this document is subject to later revision as may be necessary. The views and conclusions presented are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the Defense Advanced Research Projects Agency, the Air Force Technical Applications Center, or the US Government.

SECURITY CLASSIFICATION OF THIS PAGE (When Date Entered)

REPORT DOCUMENTATION P	AGE	READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
SDCS-ER-75-67		
4. TITLE (end Subtitle)	/	S. TYPE OF REPORT & PERIOD COVERED
SPECIAL DATA COLLECTION SYSTEM (SDC	cs)	Technical
NTS Event "HUSKY PUP", 24 October 1	.975	6. PERFORMING ORG. REPORT NUMBER
7. AUTHO®(#)		B. CONTRACT OR GRANT NUMBER(a)
Hill, K. J., Dawkins, M. S., Baumst and Gillespie, M. D.	tark, R. R.,	F08606-74-C-0013
9. PERFORMING DRGANIZATION NAME AND ADDRESS		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
Teledyne Geotech 314 Montgomery Street Alexandria, Virginia 22314	/	T/4703
11. CONTROLLING DFFICE NAME AND ADDRESS		12. REPORT DATE
Defense Advanced Research Projects	Agency	28 January 1976
Nuclear Monitoring Research Office		11 11
1400 Wilson BlvdArlington, Virging 14. MONITORING AGENCY NAME & ADDRESS(if different	from Controlling Office)	IS. SECURITY CLASS. (of this report)
VELA Seismological Center 312 Montgomery Street		Unclassified
Alexandria, Virginia 22314		15. DECLASSIFICATION DOWNGRADING
17. DISTRIBUTION STATEMENT (of the obstract entered in	n Block 20, if different fro	m Report)
18. SUPPLEMENTARY NOTES		
		4-
19. KEY WORDS (Continue on severae side if necessary and	identify by block number)	
20. ABSTRACT (Continue on reverse side if necessary and	Identily by block number)	

SDCS EVENT REPORT NO. 67

NTS Event "HUSKY PUP" 24 October 1975.

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. > Published epicenter information from seismic observations is:

	"P" Arrival	Origin Time	Lat.	Long.	mb	Ms
NORSAR	17:22:58.2	17:11:38		116 W		
Hagfors	17:23:06.4	17:11:20	36 N	118 W	5.1	N/A

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

17:11:27.0 37.1N 116.2W 4.7 N/A

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at WH2YK, CPSO, HN-ME, RK-ON, LASA and NORSAR. FN-WV did not record a "P" Arrival for this event and was not included in this report. Horizontal SP channels at WH2YK, CPSO and HN-ME were rotated. Horizontal SP channels at RK-ON were not rotated because the SP transverse channel was inoperative.

The SDCS stations and LASA did not record LP signal arrivals and are not included in this report. ALPA and NORSAR long-period data were not recoverable.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA and NORSAR short-period plots. LASA SP scaling factors are millimicrons per inch. Scaling factors are not reported for NORSAR short-period.

## STATION DESCRIPTION

SITE	LOCATION	SITE COORDINATEC DEG MN SECS	ELEVATION METERS	INSTRUMENTATION SHORT-PERIOD LONG-	NTATION LONG-PERIOD
ALPA	Alaska	65 14 00.0 N 147 44 36.0 W	626	None	31300
CPSO	McMinnville, Tennessee	35 35 41.4 N 085 34 13.5 W	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38 32 58.0 N 079 30 47.0 W	910	KS36000	KS36000
LASA	Billings, Montana	46 41 19.0 N 106 13 20.0 W	744	HS10	7505A V 8700C H
HN-ME	Houlton, Maine	46 09 43.0 N 067 59 09.0 W	213	18300	SL210 V SL220 H
NORSAR	Kjeller, Norway	60 49 25.4 N 010 49 56.5 E	379	HS10	7505A V 8700C H
RK ON	Red Lake, Ontario	50 50 20.0 N 093 40 20.0 W	366	18300	SL210 V SL220 H
WH2YK	White Horse, Yukon	60 41 41.0 N 134 58 02.0 W	853	18300	SL210 V SL220 H

The orientation of the radial instruments at FN-WV is assumed to be 316° + 5° based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable. Note:

### HYPOCENTER DETERMINATION

INPUT FOR EVENT 24 OCT 75 17:11:22.0 37.000N 116.000W OKM.

				RES	IDUALS	DIST.	AZ.
STA.		APR:	IVAL	CAIC	REST	REST	REST
LD2	17	14	20.2	^ · O	0.7	12.1	35.7
FK-CN	17	16	:1.8	-0.1	-1.0	21.1	42.3
CFSC	17	16	49.1	-0.1	0.8	24.7	84.2
WH2YK	17	17	05.4	0.1	0.7	26.5	339.2
HN-ME	17	18	34.4	0.4	-0.2	36.7	60.2
NAC	17	22	58.2	-0.2	-1.0	73.3	24.1

### 67 HERRIN TRAVEL TIME TABLES

CFIGIN IAT. LCNG. DEPTH (KM) SDV IT STA 17:11:39.4 37.540N 115.866W 78. CALC 0.2 3 6 17:11:27.0 37.082N 116.194W C. REST 0.9 2 6

		CA	IC					RE	5 <b>T</b>		
		1.	1					1 .	1		
	0			0			0			0	
0		0.	3		1	0		0.	3		1
•	•		•	•	•	•	•		•	•	•
0		0.	0		0	0		0.	0		0
	0			0			0			0	
		0.	0					0 .	0		

CHI2 CCVERAGE ELLIFSE; 95 PER CENT CONF..LEVEL, SDV= 1.74
MAJCR 66.2KM. MINCR 42.4KM. AZ= 24 AREA= 8818 SQ.KM. FEST

### DATA SUMMARY

INFUT FOR EVENT 24 OCT 75 17:11:22.0 37.000N 116.000W 0KM.

		A	RRI	VAL				MA	GNIIU	DE		
STA.	PHASE		TI	ME	INST	_FER	AZT	ME		MS	CIR	DIST
IC2 M	EP	17	14	20.2	SAE	0.8	63.	5. 5	9			12.1
PK-CN	EP	17	16	11.8	SPZ	0.8	250.	5.2	1			21.1
CFSC	EP	17	16	49.1	SPZ	0.8	39.	4.7	2			24.7
WE2YK	EP	17	17	05.4	SPZ	0.7	13.	4.2	6			26.5
HN-ME	EP	17	18	34.4	SFZ	0.9	51.	4.9	4			36.7
NAC	EP	17	22	58.2	AP	8.0	8.	4.4	7			73.3
CFI	GIN	1/2	AT.	1	LCNG.	CEPTH	(KB)	MAG	SDV	STA		
	11:39.4					78. C		4. E4	0.47	5		
	11:27.0					C. R	EST	4.72	0.38	5		

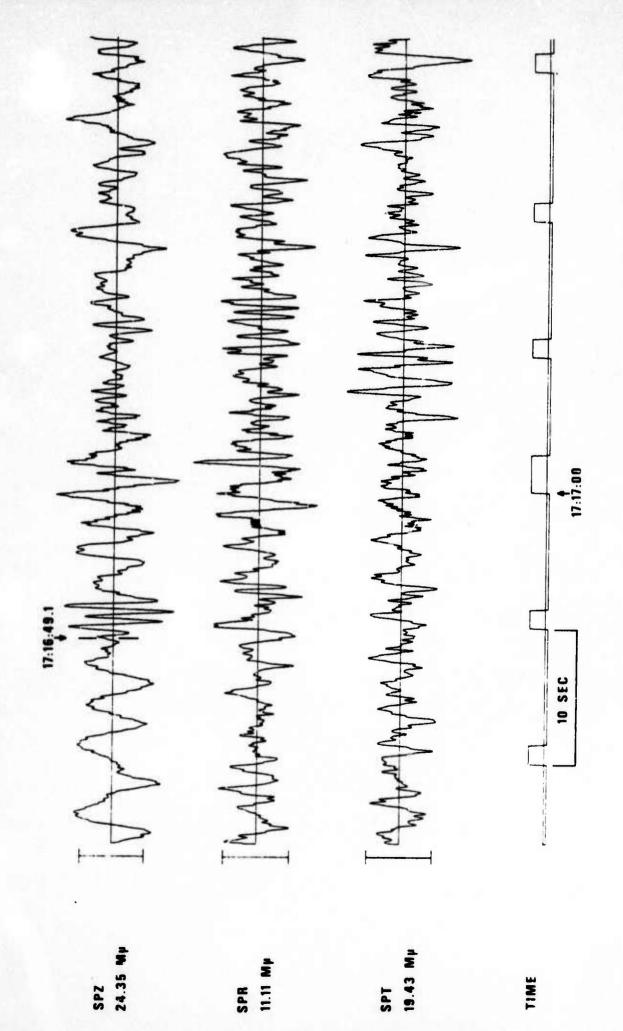
Short-period magnitudes (mb) used in averaging are restricted to those recorded at distances between 20 and 110 degrees from the epicenter.

17:16:30 17:15:11,8 10 SEC SPR 110.29 Mp TIME

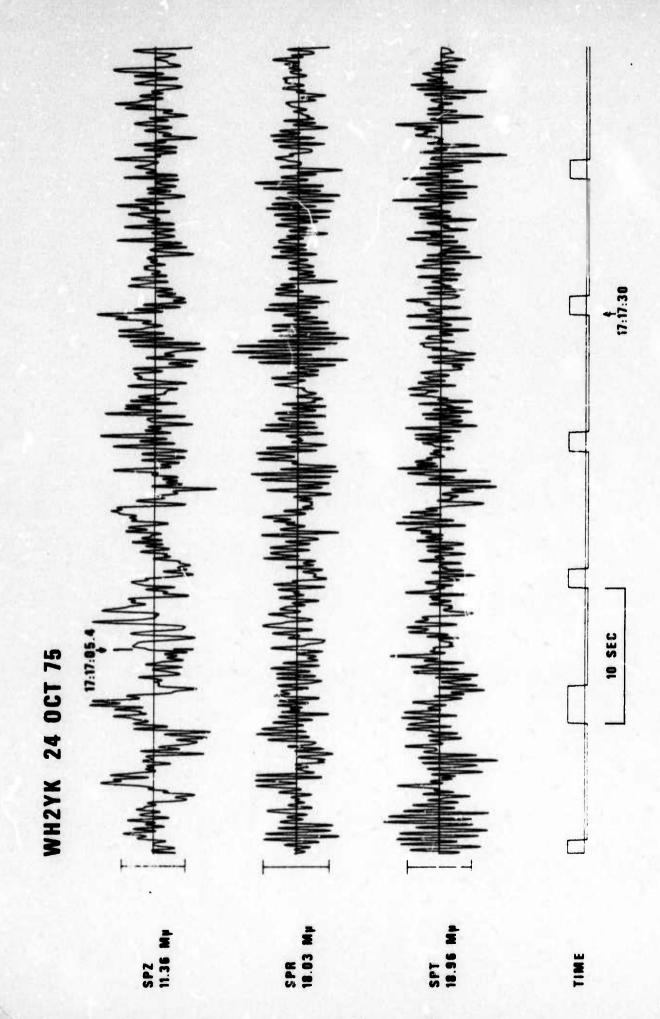
-6-

RK-0N 24 0CT 75

CPSO 24 9CT 75

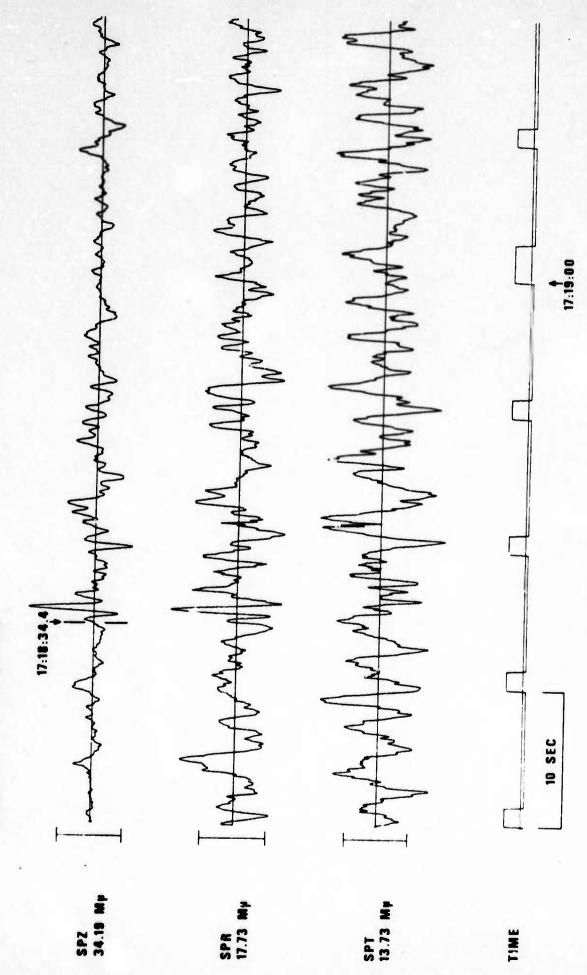


. 7-



-8.

# HN-ME 24 OCT 75



and the standard of the standa Janes of the holy of the transfer of the same of the s construction with the the transport of the section of the transport of the Joseph Marie Mille Mille Mille Mille Mille Mille Mille Mille Marie LASA INFINITE VELOCITY SUBARRAY SUMS 24 OCT 75 17:14:06.9 42.93 Mp 63.55 Mp 41.66 MP

DZSUM

NORSAR EVENT FILE 1975 OCT 24

EPX NO. 36260 ARR. 17.22.58.0 38.2N 115.6W 4.4MB 33KM

DIST = 72.1 AZI = 318.2 AMP = 3.5 PER = 0.7

= 5 SECONDS

